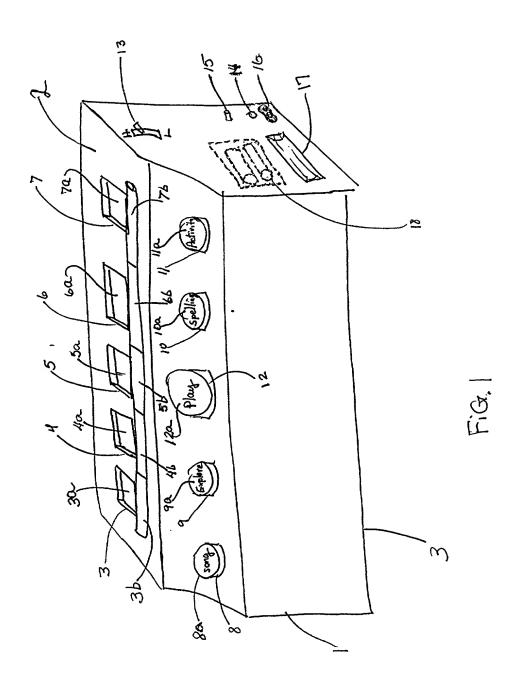
I

£3.



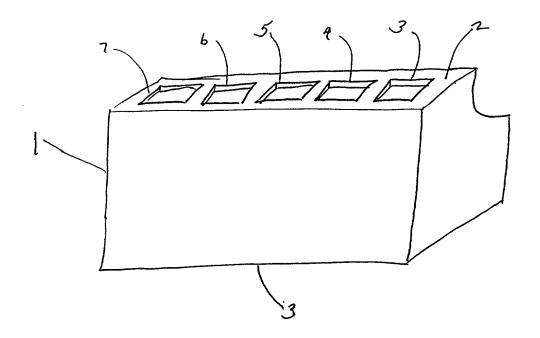
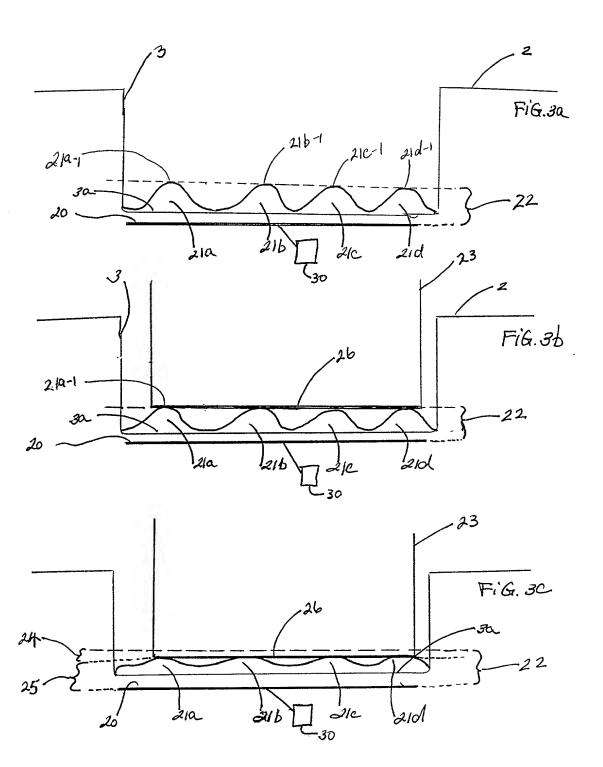


FiG. 2

>



š

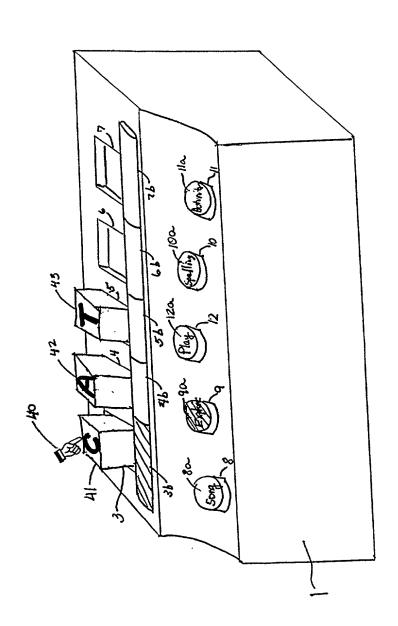


Fig. 40

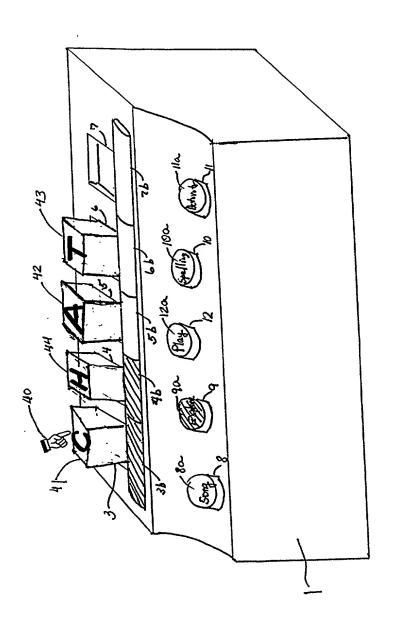


FiG. 46

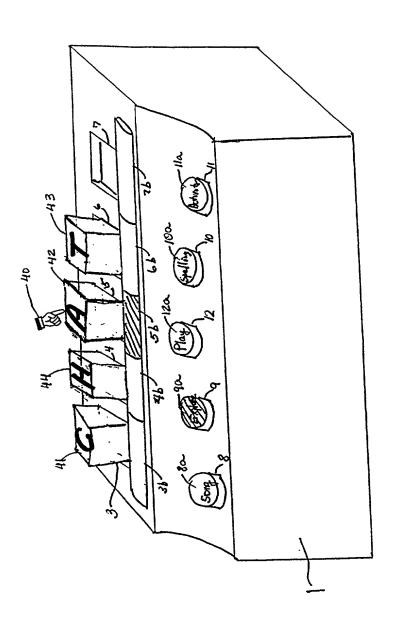


FIG. 4C

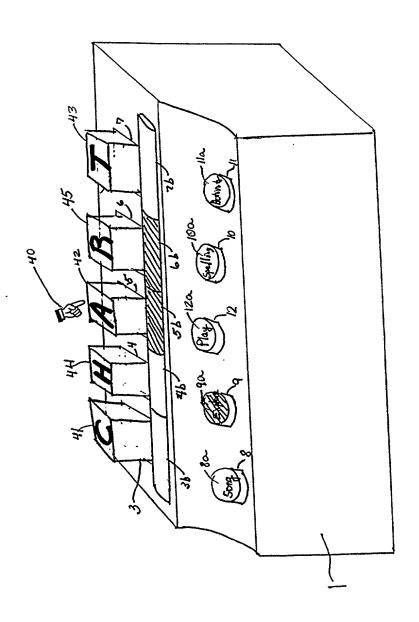
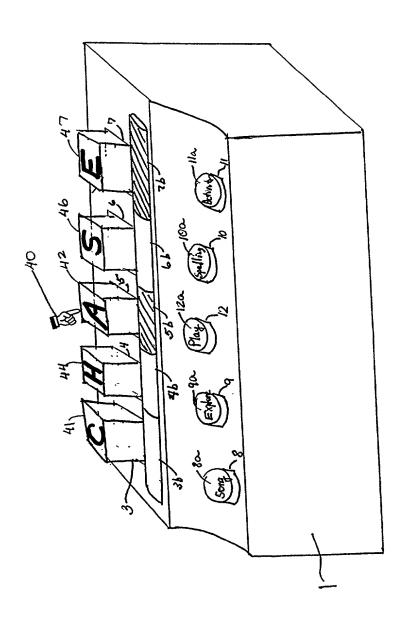


FiG. 4d



FÍG. 4E

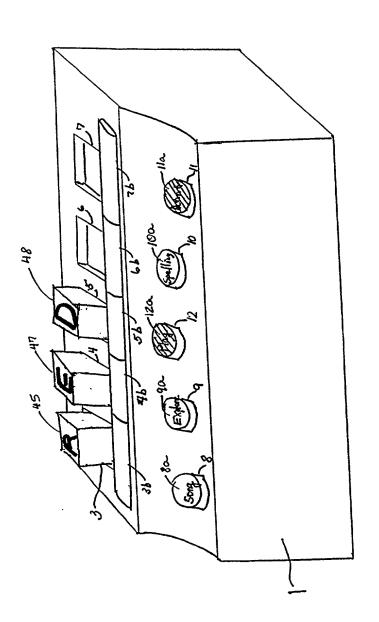


Fig. 5

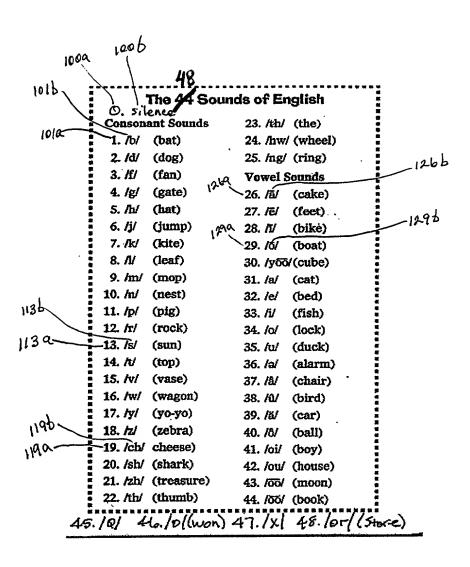


Fig. 6

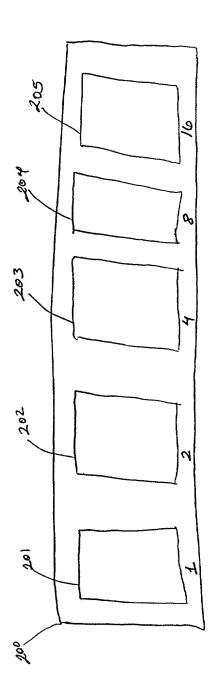


Fig. 7a

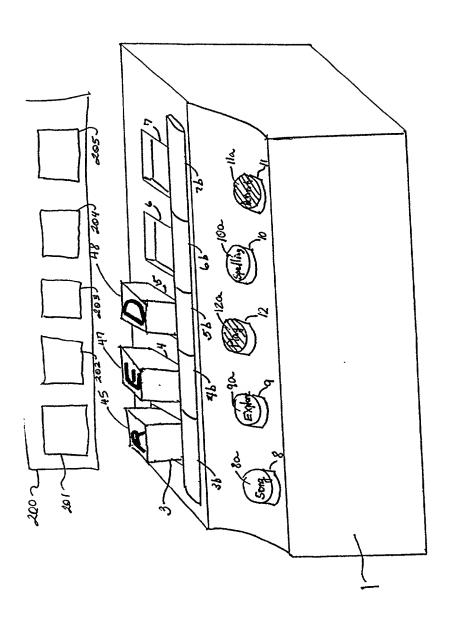


FiG. 76

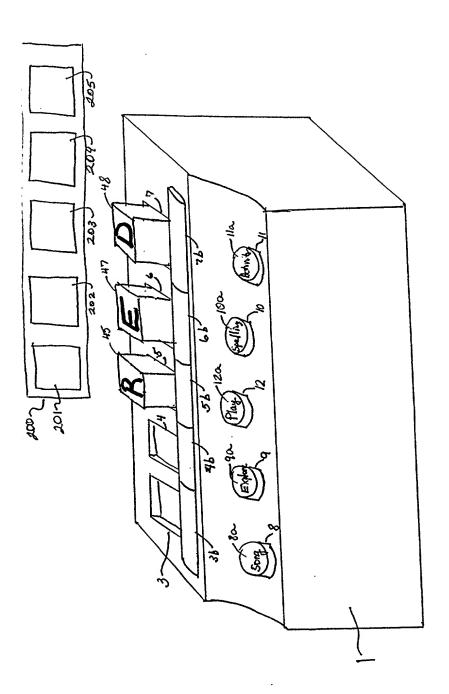


FIG. 7C

```
1. /worddict 2048 dict dup begin
             2. /a [ "a" [ "26" ] [ "01" ] true] def
             3. /i ["i" ["28" ] ["01" ] true ] def
             4. /am ["am" ["31" "9"] ["01" "02"] true] def
5. /an ["an" ["31" "10"] ["01" "02"] true] def
                 /as [ "as" [ "31" "18" ] [ "01" "02" ] true ] def
                 /at [ "at" [ "31" "14" ] [ "01" "02" ] true ] def
             8. /be["be"["1""27"]["01""02"]true]def
9. /by["by"["1""28"]["01""02"]true]def
             10. /do [ "do" [ "2" "43" ] [ "01" "02" ] true ] def
             11. /go [ "go" [ "4" "29" ] [ "01" "02" ] true ] def
             12. /he [ "he" [ "5" "27" ] [ "01" "02" ] true ] def
             13. /if ["if" ["33" "3"] ["01" "02"] true ] def
             14. /in [ "in" [ "33" "10" ] [ "01" "02" ] true ] def
             15. /is [ "is" [ "33" "18" ] [ "01" "02" ] true ] def
             16. /it [ "it" [ "33" "14" ] [ "01" "02" ] true ] def
             17. /me [ "me" [ "9" "27" ] [ "01" "02" ] true ] def
             18. /my [ "my" [ "9" "28" ] [ "01" "02" ] true ] def
             19. /no [ "know" [ "10" "29" ] [ "01" "02" ] true ] def
             20. /of ["of" ["36" "15"] ["01" "02"] true ] def
             21. /on [ "on" [ "34" "10" ] [ "01" "02" ] true ] def
             22. /or [ "or" [ "29" "12" ] [ "01" "02" ] true ] def
             23. /ox [ "ox" [ "34" "47" ] [ "01" "02" ] true ] def
             24. /so ["sew" ["13" "29"] ["01" "02"] false] def
25. /to ["to" ["14" "43"] ["01" "02"] true] def
302
             26. /up [ "up" [ "35" "11" ] [ "01" "02" ] true ] def
             27. /us [ "us" [ "35" "13" ] [ "01" "02" ] true ] def
             28. /we [ "we" [ "16" "27" ] [ "01" "02" ] true ] def
                        303
["acc" ["26" "13" "0"] ["05" "02" "05"] uue] def
                                                                                                        302
             29. /ace
                        ["act" ["31" "7" "14"] ["01" "02" "04"] true ] def
             30. /act
                                                                                                   309
                         [ "age" [ "26" "6" "0" ] [ "05" "02" "05" ] true ] def
             31. /age
                         [ "ago" [ "36" "4" "29" ] [ "01" "02" "04" ] true ] def
             32. /ago
                       ["air" ["37" "37" "12" ] [ "03" "03" "04" ] true ] def
             33. /air
                        ["all" ["40" "8" "8"] ["01" "02" "04"] true] def
             34. /all
                         ["and" ["31" "10" "2"] ["01" "02" "04"] true] def
             35. /and
             36. /ant ["ant" ["31" "10" "14"] ["01" "02" "04"] true ] def
             37. /any ["any" ["32" "10" "27" ] ["01" "02" "04" ] true ] def
                        ["ape" ["26" "11" "0" ] ["05" "02" "05" ] true ] def
             38. /ape
                        ["are" ["39" "12" "0" ] ["03" "03" "04" ] true ] def
             39. /are
             40. /arm ["arm" ["39" "12" "9"] ["03" "03" "04"] true] def
             41. /art ["art" ["39" "12" "14" ] ["03" "03" "04" ] true ] def
                        ["ask" ["31" "13" "7"] ["01" "02" "04"] true ] def
             42. /ask
             43. /ate ["ate" ["26" "14" "0"] ["05" "02" "05"] true ] def
             44. /bad ["bad" ["1" "31" "2"] ["01" "02" "04"] true ] def
             45. /bag ["bag" ["1" "31" "4"] ["01" "02" "04"] true ] def
46. /bar ["bar" ["1" "39" "12"] ["01" "02" "04"] true ] def
```

FiG. 8a

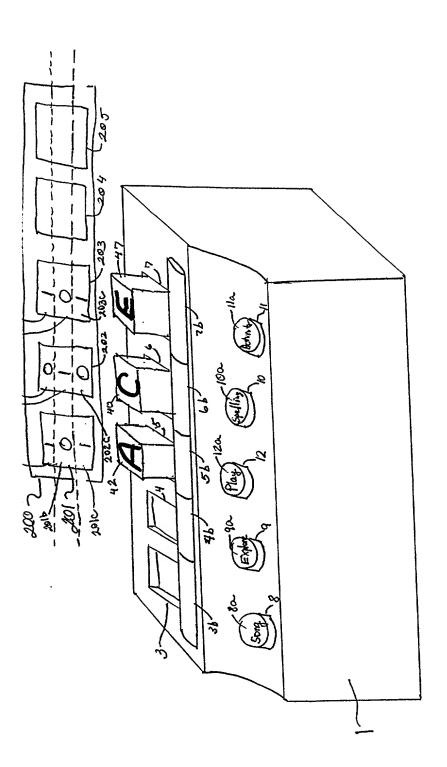
```
["bat" [ "1" "31" "14" ] [ "01" "02" "04" ] true ] def
            [ "bed" [ "1" "32" "2" ] [ "01" "02" "04" ] true ] def
48. /bed
            ["bee" ["1" "27" "27" ] ["01" "06" "06" ] true ] def
           ["bet" ["1" "32" "14" ] ["01" "02" "04" ] true ] def
50. /bet
           ["big" ["1" "33" "4" ]["01" "02" "04" ] true ] def
51. /big
52. /bit ["bit" ["1" "33" "14" ] ["01" "02" "04" ] true ] def
            ["bow" [ "1" "29" "29" ] [ "01" "06" "06" ] true ] def
53. /bow
            [ "box" [ "1" "34" "47" ] [ "01" "02" "04" ] true ] def
54. /box
              "boy" [ "1" "41" "41" ] [ "01" "06" "06" ] true ] def
55. /boy
            ["bud" [ "1" "35" "2" ] [ "01" "02" "04" ] true ] def
56. /bud
            ["bug" ["1" "35" "4" ] ["01" "02" "04" ] true ] def
57. /bug
              "bun" [ "1" "35" "10" ] [ "01" "02" "04" ] true ] def
58. /bun
            ["bus" ["1" "35" "13" ] ["01" "02" "04" ] true ] def
59. /bus
            ["but" ["1" "35" "14" ] ["01" "02" "04" ] true ] def
60. /but
            ["by" [ "1" "28" "28" ] [ "01" "06" "06" ] true ] def
61. /buy
            ["by" [ "1" "28" "0" ] [ "01" "06" "06" ] true ] def
62. /bye
            ["cab" | "7" "31" "1" ] [ "01" "02" "04" ] true ] def
63. /cab
            ["can"["7" "31" "10"]["01" "02" "04"] true] def
64. /can
            ["cap" [ "7" "31" "11" ] [ "01" "02" "04" ] true ] def
65. /cap
           [ "car" [ "7" "39" "12" ] [ "01" "02" "04" ] true ] def
66. /car
             "cat" [ "7" "31" "14" ] [ "01" "02" "04" ] true ] def
67. /cat
            [ "cop" [ "7" "34" "11" ] [ "01" "02" "04" ] true ] def
68. /cop
            ["cow" [ "7" "42" "42" ] [ "01" "06" "06" ] true ] def
69. /cow
           ["cry" [ "7" "12" "28" ] [ "01" "02" "04" ] true ] def ["cup" [ "7" "36" "11" ] [ "01" "02" "04" ] true ] def
70. /cry
71. /cup
72. /cut
            ["cut" [ "7" "36" "14" ] [ "01" "02" "04" ] true ] def
            ["dad" [ "2" "31" "2" ] [ "01" "02" "04" ] true ] def
73. /dad
            ["day" [ "2" "26" "26" ] [ "01" "06" "06" ] true ] def
["den" [ "2" "32" "10" ] [ "01" "02" "04" ] true ] def
74. /day
75. /den
            ["did" [ "2" "33" "2" ] [ "01" "02" "04" ] true ] def
76. /did
           ["dig" [ "2" "33" "4" ] [ "01" "02" "04" ] true ] def
77. /dig
            ["dog" [ "2" "40" "4" ] [ "01" "02" "04" ] true ] def
78. /dog
            ["dot" ["2" "34" "14" ] ["01" "02" "04" ] true ] def
79. /dot
            ["dry"["2" "12" "28"]["01" "02" "04"] true] def
80. /dry
81. /ear
            ["ear" ["27" "27" "12"] ["03" "03" "04"] true ] def
           ["eat" ["27" "27" "14" ] ["03" "03" "04" ] true ] def
["egg" ["32" "4" "4" ] ["01" "06" "06"] true ] def
82. /eat
83. /egg
            ["end" ["32" "10" "2"] ["01" "02" "04"] true ] def
84. /end
            ["eye" ["28" "28" "0"] ["04" "05" "07"] true ] def
85. /cye
            ["fan" [ "3" "31" "10" ] [ "01" "02" "04" ] true ] def
87. /far ["far" ["3" "39" "12"] ["01" "02" "04"] true ] def
88. /fat ["fat" ["3" "31" "14" ] ["01" "02" "04" ] true ] def
89. /fed [ "fed" [ "3" "32" "2" ] [ "01" "02" "04" ] true ] def
90. /few [ "few" [ "3" "30" "30" ] [ "01" "06" "06" ] true ] def
91. /fit ["fit" [ "3" "33" "14" ] [ "01" "02" "04" ] true ] def
          ["fix"["3""33""47"]["01" "02" "04"] true] def
92. /fix
           ["fly" ["3" "8" "28" ] ["01" "02" "04" ] true ] def
["for" ["3" "29" "12" ] ["01" "02" "04" ] true ] def
94. /for
95. /fox ["fox"["3""34" "47"]["01" "02" "04"] true] def
           ["fry" [ "3" "12" "28" ] [ "01" "02" "04" ] true ] def
[ "fun" [ "3" "36" "10" ] [ "01" "02" "04" ] true ] def
96. /fry
98. /fur ["fur" ["3" "38" "12"] ["01" "02" "04"] true ] def
           ["gap" [ "4" "31" "11" ] [ "01" "02" "04" ] true ] def
100./get ["get" ["4" "32" "14" ] ["01" "02" "04" ] true ] def
```

101./gnu ["gnu" ["0" "10" "43"] ["03" "02" "04"] true ] def 102./got ["got" ["4" "34" "14" ] ["01" "02" "04" ] true ] def 103./gum ["gum" [ "4" "35" "9" ] [ "01" "02" "04" ] true ] def 104/guy ["guy" ["4" "28" "28"] ["01" "06" "06"] true ] def 105./had ["had" ["5" "31" "2"] ["01" "02" "04"] true ] def 106./ham ["ham" [ "5" "31" "9" ] [ "01" "02" "04" ] true ] def 107./has ["has" ["5" "31" "18"] ["01" "02" "04"] true ] def 108./hat ["hat" ["5" "31" "14" ] ["01" "02" "04" ] true ] def ["hay" [ "5" "26" "26" ] [ "01" "06" "06" ] true ] def 109./hay ["hen" [ "5" "32" "10" ] [ "01" "02" "04" ] true ] def ["her" [ "5" "38" "12" ] [ "01" "02" "04" ] true ] def 110./hen 111./her 112./hey [ "hay" [ "5" "26" "26" ] [ "01" "06" "06" ] false ] def 113./hid ["hid" ["5" "33" "2"] ["01" "02" "04"] true ] def 114./him ["him" ["5" "33" "9"] ["01" "02" "04"] true] def 115./hip ["hip" ["5" "33" "11"] ["01" "02" "04"] true] def ["his" [ "5" "33" "18" ] [ "01" "02" "04" ] true ] def 116./his 117./hit ["hit" ["5" "33" "14"]["01" "02" "04"] true] def 118./hog ["hog" [ "5" "34" "4" ] [ "01" "02" "04" ] true ] def ["hop" [ "5" "34" "11" ] [ "01" "02" "04" ] true ] def 119./hop 120./hot ["hot" ["5" "34" "14" ] ["01" "02" "04" ] true ] def ["how" [ "5" "42" "42" ] [ "01" "06" "06" ] true ] def 121./how 122./hug ["hug" [ "5" "35" "4" ] [ "01" "02" "04" ] true ] def 123./hum [ "hum" [ "5" "35" "9" ] [ "01" "02" "04" ] true ] def 124./hut ["hut" ["5" "35" "14" ] ["01" "02" "04" ] true ] def 125./ice ["ice" ["28" "13" "0"] ["05" "02" "05"] true ] def ["ink" ["33" "10" "7" ] ["01" "02" "04" ] true ] def ["jam" [ "6" "31" " 9" ] ["01" "02" "04" ] true ] def 126./ink 127./jam 128./jar ["jar" [ "6" "39" "12" ] [ "01" "06" "04" ] true ] def 129./jaw ["jaw" [ "6" "40" "40" ] [ "01" "05" "04" ] true ] def 130./jet ["jet" ["6" "32" "14"] ["01" "02" "04"] true] def ["job" [ "6" "40" "1" ] [ "01" "02" "04" ] true ] def 131./job ["jog" [ "6" "40" "4" ] [ "01" "02" "04" ] true ] def 132./jog ["joy" [ "6" "41" "41" ] [ "01" "06" "06" ] true ] def 133./joy ["jug" [ "6" "35" "4" ] [ "01" "02" "04 ] true ] def 134./jug ["key" [ "7" "27" "27" ] [ "01" "06" "06" ] true ] def 135./key ["kid" [ "7" "33" "2" ] [ "01" "02" "04" ] true ] def 136./kid 137./kit ["kit" ["7" "33" "14" ] ["01" "02" "04" ] true ] def ["lab" [ "8" "31" "1" ] [ "01" "02" "04" ] true ] def [ "lay" [ "8" "26" "26" ] [ "01" "06" "06" ] true ] def 138./lab 139./lay ["leg" [ "8" "32" "4" ] [ "01" "02" "04" ] true ] def 140./leg ["let" [ "8" "32" "14" ] [ "01" "02" "04" ] true ] def ["lid" [ "8" "33" "2" ] [ "01" "02" "04" ] true ] def 141./lct 142./lid ["lie" [ "8" "28" "0" ] [ "01" "06" "06" ] true ] def 143./lie 144./lip ["lip" [ "8" "33" "11" ] [ "01" "02" "04" ] true ] def 145./log ["log" ["8" "34" "4"] ["01" "02" "04"] true] def 146./lot ["lot" ["8" "34" "14"] ["01" "02" "04"] true] def 147./mad ["mad" [ "9" "31" "2" ] [ "01" "02" "04" ] true ] def ["man" [ "9" "31" "10"] [ "01" "02" "04"] true ] def 148./man 149./map ["map" ["9" "31" "11" ] ["01" "02" "04" ] true ] def 150./mat ["mat" ["9" "31" "14" ] ["01" "02" "04" ] true ] def ["may" [ "9" "26" "26" ] [ "01" "06" "06" ] true ] def 151./may ["men" [ "9" "32" "10" ] [ "01" "02" "04" ] true ] def ["met" [ "9" "32" "14" ] [ "01" "02" "04" ] true ] def 152./men 154./mix ["mix" [ "9" "33" "47" ] [ "01" "02" "04" ] true ] def

Fig. 8c

155./mom ["mom" ["9" "34" "9" ] ["01" "02" "04" ] true ] def 156./moo ["moo" ["9" "43" "43" ] ["01" "06" "06" ] true ] def ["mop" [ "9" "34" "11" ] [ "01" "02" "04" ] true ] def 157./mop ["mud" [ "9" "35" "2" ] [ "01" "02" "04" ] true ] def 158./mud 159./mug ["mug" [ "9" "35" "4" ] [ "01" "02" "04" ] true ] def 160./nap ["nap" ["10" "31" "11" ] ["01" "02" "04" ] true ] def 161./net ["net" ["10" "32" "14" ] ["01" "02" "04" ] true ] def ["new" ["10" "43" "43" ] [ "01" "06" "06" ] true ] def 162./new ["nod" ["10" "34" "2" ] ["01" "02" "04" ] true ] def 164./not ["not" ["10" "34" "14"] ["01" "02" "04"] true ] def [ "now" [ "10" "42" "42" ] [ "01" "06" "06" ] true ] def 166./nut ["nut" ["10" "35" "14" ] ["01" "02" "04" ] true ] def ["off" ["34" "3" "3" ] ["01" "06" "06" ] true ] def 167./off ["oil" ["41" "41" "8"] ["03" "03" "04"] true ] def 168./oil "old" [ "29" "8" "2" ] [ "01" "02" "04" ] true ] def 169./old ["one"["16" "10" "0"]["01" "02" "04"] true] def 170./one [ "our" [ "42" "42" "12" ] [ "03" "03" "04" ] true ] def 171./our [ "out" [ "42" "42" "14" ] [ "03" "03" "04" ] true ] def 172./out ["owl" ["42" "42" "8"] ["01" "02" "04"] true ] def 173./owl 174./own ["own" ["29" "29" "10" ] ["01" "02" "04" ] true ] def ["pad" ["11" "31" "2"] ["01" "02" "04"] true ] def 175./pad ["pal"["11" "31" "8"]["01" "02" "04"] true] def 176./pal "pan" [ "11" "31" "10" ] [ "01" "02" "04" ] true ] def 177./pan ["pat" ["11" "31" "14" ] ["01" "02" "04" ] true ] def 178./pat ["pea" ["11" "27" "27"] ["01" "06" "06"] true] def 179./pea 180./pen ["pen" ["11" "32" "10"] ["01" "02" "04"] true] def ["pet" ["11" "32" "14" ] ["01" "02" "04" ] true ] def 181./pet ["pie" ["11" "28" "28"] ["01" "06" "06"] true ] def 182./pie ["pig" ["11" "33" "4"] ["01" "02" "04"] true ] def 183./pig 184./pin ["pin" ["11" "33" "10"] ["01" "02" "04"] true ] def "pit" [ "11" "33" "14" ] [ "01" "02" "04" ] true ] def 185./pit ["pop" ["11" "34" "11"] ["01" "02" "04"] true ] def 186./pop ["pot" ["11" "34" "14" ] ["01" "02" "04" ] true ] def 187./pot ["put" ["11" "36" "14" ] ["01" "02" "04" ] true ] def ["rag" ["12" "31" "8" ] ["01" "02" "04" ] true ] def 188./put 189./rag ["ram" ["12" "31" "9"] ["01" "02" "04"] true] def 190./ram 191./ran ["ran" ["12" "31" "10" ] ["01" "02" "04" ] true ] def ["rap" ["12" "31" "11" ] ["01" "02" "04" ] true ] def 192./rap ["rat" ["12" "31" "14" ] ["01" "02" "04" ] true ] def 193./rat ["raw" ["12" "34" "34" ] ["01" "06" "06" ] true ] def 194./raw ["ray" ["12" "26" "26" ] ["01" "06" "06" ] true ] def ["red" ["12" "31" "2" ] ["01" "02" "04" ] true ] def 195./ray ["rib" ["12" "33" "1"] ["01" "02" "04"] true ] def 197./rib ["rid" ["12" "33" "2"] ["01" "02" "04"] true ] def 198./rid [ "rip" [ "12" "33" "11" ] [ "01" "02" "04" ] true ] def 199./rip [ "rod" [ "12" "34" "2" ] [ "01" "02" "04" ] true ] def 200./rod 201./rot ["rot" ["12" "34" "14"] ["01" "02" "04"] true ] def [ "row" [ "12" "29" "29" ] [ "01" "06" "06" ] true ] def 202./row 203./rub ["rub" ["12" "35" "1"] ["01" "02" "04"] true ] def 204./rug ["rug" ["12" "35" "4" ] ["01" "02" "04" ] true ] def ["run" ["12" "35" "10"] ["01" "02" "04"] true ] def 205./run 206./sad ["sad" ["13" "31" "2"] ["01" "02" "04"] true ] def 207./sat ["sat" ["13" "31" "14"] ["01" "02" "04"] true ] def 208./saw ["saw" ["13" "40" "40"] ["01" "06" "06"] true ] def

Fig. 8d



Fi Q. 9

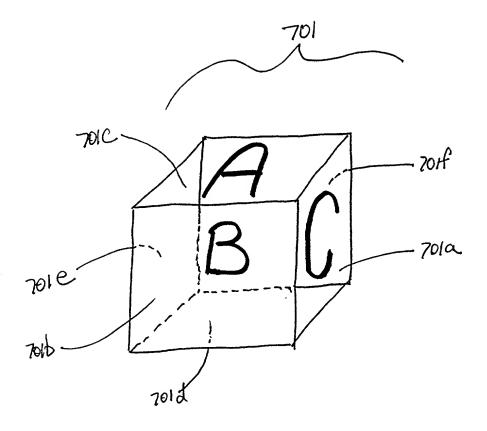


FiG. 10

Create virtual word with the letters in the block stations 400 (Pass 1) Shift through each letter of the virtual word: assign each letter its normal sound; light the block station for that letter. 401 (Pass 2) Find each consonant in the virtual word 402a If the letter preceding a consonant is also a consonant, and if the two consonants are the same consonant: assign first consonant the silence phoneme #0; allow second consonant to default to its normal sound; light block stations for both consonants. 402b (Pass 3) If the virtual word has the letter 'h', and if the letter 'c' immediately precedes the letter 'h': assign the /ch/ phoneme #19 to both the 'c' and the 'h'; light block stations for both 'c' and 'h'. 403 (Pass 4) If the virtual word has the letter 't', if the letter immediately preceding the letter 't' is the letter 'h', and if the letter immediately preceding the letter 'h' is the letter g: assign the silence phoneme #0 to both the 'g' and 'h' block stations; allow the 't' letter to default to its normal sound; light all three block stations for 'g', 'h', and 't'. 404

Fig. 11a

(Pass 5)

If the virtual word has the letter 'g', and if letter immediately following the 'g', is 'e' or 'i': assign the letter 'g' the /j/ phoneme #6; light both block stations for 'g', and for the 'e' or 'i'.

(Pass 6)

If the virtual word has the letter 'c', and if the letter immediately following the letter 'c', is 'e' or 'i': assign the letter 'c' the /s/ phoneme #13; light both block stations for 'g', and for the 'e' or 'i'.

(Pass 7)

If 'k' is the last letter of the virtual word, and if the letter 'k' is immediately preceded by the letter 'c': assign the /k/ phoneme #7 to both the 'k' and the 'c'; light both the 'k' and the 'c' block stations.

(Pass 8)

If 'k' is the first letter of the virtual word, and if the letter 'k' is followed by the letter 'n': assign the letter 'k' the silence phoneme #0; light both the 'k' and the 'n' block stations.

408

(Pass 9)

If 'w' is the first letter of the virtual word, and if the letter 'r' immediately follows the letter 'w'; assign the 'w' the silence phoneme #0; light both the 'w' and the 'r' block stations. 409

Fig. 11b

(Pass 10)

If the virtual word has the letter 'e', and if a second letter 'e' precedes or follows the first letter 'e'; assign both letters 'e' the /ē/ phoneme #27; light the block stations for both 'e' letters.

410

### (Pass 11)

If the virtual word has the letter 'r', and if the letter 'r' is immediately preceded by a vowel, then: if the vowel is the letter 'i', assign the letter 'i' the /û/ phoneme #38; else if the vowel is the letter 'u', assign the letter 'u' the /û/ phoneme #38; else if the vowel is the letter 'e', assign the letter 'e' the /û/ phoneme #38; else if the vowel is the letter 'a', assign the letter 'a' the /a' phoneme #39; else if the vowel is the letter 'o', assign the letter 'o' the /ö/ phoneme #48; light the block stations for the vowel and the letter 'r'.

411

## (Pass 12)

If the virtual word has the letter 'r', and if the letter 'r' is immediately preceded by the letter 'a' or the letter 'o', and if the letter 'r' is immediately followed by the letter 'e': assign the letter 'e' the silence phoneme #0; if the letter preceding the letter 'r' is the letter 'a', then assign the letter 'a' the /a/ phoneme #37;

else if the letter preceding the letter 'r' is the letter 'o', then assign the letter 'o' the /ö/ phoneme #48;

light the block stations for the letter 'r', and 'e', and for the letters 'a' or 'o'. 412

### (Pass 13)

If the virtual word ends in the letter 'y', and if the virtual word has no vowels: assign the letter 'y' the /ī/ phoneme #28; else if the virtual word ends in the letter 'y', and if the virtual word has at least one vowel: assign the letter 'y' the /ē/ phoneme #27. 413

Fig. 11c

(Pass 14)

If the virtual word has the letter 'y', and if the letter immediately preceding the letter 'y' is the letter 'a': assign the letter 'y' the silence phoneme #0; assign the letter 'a' the /a/ phoneme #26; light the block stations for both the 'a' and the 'y'.

414

(Pass 15)

If the last letter in the virtual word is a vowel, and
If there is only one vowel in the virtual word, then:
if the vowel is the letter 'e', assign the letter 'e' the /ē/ phoneme #27;
else if the vowel is the letter 'i', assign the letter 'i' the /ī/ phoneme #28;
else if the vowel is the letter 'o', assign the letter 'o' the /ō/ phoneme #29.

415

(Pass 16)

If the virtual word has the letter 'h', and if the letter 'h' is immediately preceded by the letter 'g', and if the letter 'g' is immediately preceded by the letter 'i', then: assign the silence phoneme #0 to both the letters 'g' and 'h'; assign the fi/ phoneme 28 to the letter 'i'; light the block stations for the letters 'i', 'g', and 'h'.

416

(Pass 17)

If the virtual word has the letter 'o', and if the letter 'o' is immediately preceded by or immediately followed by another letter 'o', then:

assign both letter 'o's the /oo/ phoneme #43; and light the block stations for both letter 'o's.

417

(Pass 18)

If the virtual word has the letter 'w', and if the letter 'w' is immediately preceded by the letter 'e', then: assign both letter 'e' and letter 'w' the /ōō/ phoneme #43; and light the block stations for both letters.

418

49

Fig. 110

(Pass 19)

If the virtual word has the letter 'u', and if the letter 'u' is immediately followed by a consonant, and if the consonant is immediately followed by the letter 'e', then:

assign the letter 'e' the silence phoneme #0;
assign the letter 'u' the /oo/ phoneme #43; and light the block station for the letter 'u' and the block station for the letter 'e'.

419

(Pass 20)

If the virtual word has the letter 'o', and if the letter 'o' is immediately followed by the letter 'u', then: assign the letters 'o' and 'u' the /ou/ phoneme #42.; and light the block station for the letter 'o' and the block station for the letter 'u'.

(Pass 21)

If the virtual word has the letter 'g', and if the letter 'g' is immediately followed by the letter 'n', then: assign the letter 'g' the silence phoneme #0; the letter 'n' defaults to its normal sound; and light the block station for the letter 'g' and the block station for the letter 'n'.

421

721

(Pass 22)

If the virtual word has the letter 'y', and if the letter 'y' is immediately preceded by the letter 'o', then: assign the letter 'o' the /oi/ phoneme #41; assign the letter 'y' the /oi/ phoneme #41; and light the block station for the letter 'o' and the block station for the letter 'y'.

(Pass 23)

If the virtual word has the letter 'h', and if the letter 'h' is directly preceded by the letter 'w', then: assign the letter 'w' the /hw/ phoneme #24; assign the letter 'h' the /hw/ phoneme #24; and light the block station for the letter 'w' and the block station for the letter 'h'.

(424)

Fig. 11e

#### (Pass 24)

If the virtual word has two vowels, and if the word ends in the letter 'e', and

if the letter that directly precedes the letter 'e' is a consonant, then: assign the letter 'e' the silence phoneme #0;

if the letter directly preceding the consonant is the letter 'a', assign the letter 'a' the /ā/ phoneme #26;

else if the letter directly preceding the consonant is the letter 'e', assign the letter 'e' the /ē/ phoneme #27;

else if the letter directly preceding the consonant is the letter 'i', assign the letter 'i' the /i/ phoneme #28;

else if the letter directly preceding the consonant is the letter 'o', assign the letter 'o' the /ō/ phoneme #29;

else if the letter directly preceding the consonant is the letter 'u', assign the letter 'u' the /ū/ phoneme #43; and

light the block station for the letter 'e' and the block station for the vowel that directly precedes the consonant.

424

(Pass 25)

If the virtual word has two vowels, and if the word ends in the letters 'ed', and

if the letter that directly precedes the letter 'e' is a consonant, then:

assign the letter 'e' the silence phoneme #0;

if the letter directly preceding the consonant is the letter 'a', assign the letter 'a' the /a/ phoneme #26;

else if the letter directly preceding the consonant is the letter 'e', assign the letter 'e' the /ē/ phoneme #27;

else if the letter directly preceding the consonant is the letter 'i', assign the letter 'i' the /i/ phoneme #28;

else if the letter directly preceding the consonant is the letter 'o', assign the letter 'o' the /ō/ phoneme #29;

else if the letter directly preceding the consonant is the letter 'u', assign the letter 'u' the /ū/ phoneme #43; and

light the block station for the letter 'e' and the block station for the vowel that directly precedes the consonant.

425

(426)

Fig. 11f

#### (Pass 26)

If the virtual word has two vowels, and if the word ends in the letters 'es', and

if the letter that directly precedes the letter 'e' is a consonant, then: assign the letter 'e' the silence phoneme #0;

if the letter directly preceding the consonant is the letter 'a', assign the letter 'a' the /ā/ phoneme #26;

else if the letter directly preceding the consonant is the letter 'e', assign the letter 'e' the /ē/ phoneme #27;

else if the letter directly preceding the consonant is the letter 'i', assign the letter 'i' the /ī/ phoneme #28;

else if the letter directly preceding the consonant is the letter 'o', assign the letter 'o' the /ō/ phoneme #29;

else if the letter directly preceding the consonant is the letter 'u', assign the letter 'u' the /u/ phoneme #43; and

light the block station for the letter 'e' and the block station for the vowel that directly precedes the consonant.

426

### (Pass 27)

If the virtual word has two vowels, and if the word ends in the letters 'er', and

if the letter that directly precedes the letter 'e' is a consonant, then: assign the letter 'e' the /û/ phoneme #38;

if the letter directly preceding the consonant is the letter 'a', assign the letter 'a' the /ā/ phoneme #26;

else if the letter directly preceding the consonant is the letter 'e', assign the letter 'e' the /ē/ phoneme #27;

else if the letter directly preceding the consonant is the letter 'i', assign the letter 'i' the /i/ phoneme #28;

else if the letter directly preceding the consonant is the letter 'o', assign the letter 'o' the /ō/ phoneme #29;

else if the letter directly preceding the consonant is the letter 'u', assign the letter 'u' the /ū/ phoneme #43; and

light the block stations for the letters 'e' and 'r' and the block station for the vowel that directly precedes the consonant.

427

(428)

Fig. 11g

(Pass 28)

If the virtual word has the letter 'u', and if the letter 'u' is directly preceded by the letter 'q', then: assign the letter 'q' the /k/ phoneme #7; assign the letter 'u' the /w/ phoneme #16; and block station for the letter 'a' and the block station for the letter 'a'.

light the block station for the letter 'q' and the block station for the letter 'u'.

428

(Pass 29)

If the virtual word has the letter 'p', and if the letter 'p' is directly followed by the letter 'h', then: assign the letter 'p' the /f/ phoneme #3; assign the letter 'h' the /f/ phoneme #3; and

light the block station for the letter 'p' and the block station for the letter 'h'.

429

(Pass 30)

If the virtual word has the letter 'n', and if the letter 'n' is directly followed by the letter 'g', then: assign the letter 'n' the /ng/ phoneme #25; assign the letter 'g' the /ng/ phoneme #25; and light the block station for the letter 'n' and the block station for the letter 'g'.

430

43

(Pass 31)

If the virtual word has the letter 's', and if the letter 's' is directly followed by the letter 'h', then: assign the letter 's' the /sh/ phoneme #20; assign the letter 'h' the /sh/ phoneme #20; and light the block station for the letter 's' and the block station for the letter 'h'.

431

431

(Pass 32)

If the virtual word has the letter 't', and if the letter 't' is directly followed by the letter 'h', then: assign the letter 't' the /th/ phoneme #22; assign the letter 'h' the /th/ phoneme #22; and light the block station for the letter 't' and the block station for the letter 'h'.

432

433

Fig. 11h

### (Pass 33)

If the virtual word has the letter 'a', and if the letter 'a' is directly followed by the letter 'w', then: assign the letter 'a' the /ô/ phoneme #40; assign the letter 'w' the /ô/ phoneme #40; and light the block station for the letter 'a' and the block station for the letter 'w'.

433

### (Pass 34)

If the virtual word has the letter 'a', and if the letter 'a' is directly followed by the letter 'i', then: assign the letter 'a' the /a/ phoneme #26; assign the letter 'i' the /a/ phoneme #26; and light the block station for the letter 'a' and the block station for the letter 'i'.

434

(Pass 35)

If the virtual word has the letter 'o', and if the letter 'o' is directly followed by the letter 'a', then: assign the letter 'o' the /ō/ phoneme #29; assign the letter 'a' the /ō/ phoneme #29; and light the block station for the letter 'o' and the block station for the letter 'a'.

435

\_\/

(Pass 36)
If the virtual word has the letter 'e', and

if the letter 'e' is directly followed by the letter 'a', then:
assign the letter 'e' the /ē/ phoneme #27;
assign the letter 'a' the /ē/ phoneme #27; and
light the block station for the letter 'e' and the block station for the letter 'a'.

436

(437)

Fig. 11i

#### (Pass 37)

If the virtual word has the letter 'd', and if the letter 'd' is directly preceded by the letter 'l', and if the letter 'l' is directly preceded by the letter 'u', and if the letter 'u' is directly preceded by the letter 'o', then: assign the letter 'o' the /ŏŏ/ phoneme #44; assign the letter 'u' the /ŏŏ/ phoneme #44; assign the letter 'l' the silence phoneme #0; assign the letter 'd' the /d/ phoneme #2; and light the block stations for the letters 'o', 'u', 'l', and 'd'.

437

### (Pass 38)

If the virtual word has the letter 'n', and if the letter 'o' is directly preceded by the letter 'o', and if the letter 'o' is directly preceded by the letter 'i', and if the letter 'i' is directly preceded by the letter 't', then: assign the letter 't' the /sh/ phoneme #20; assign the letter 'i' the /sh/ phoneme #20; assign the letter 'o' the /s/ phoneme #36; assign the letter 'n' the /n/ phoneme #10; and light the block stations for the letters 't', 'i', 'o', and 'n'.

Ų.

# (Pass 39)

If the virtual word has the letter 'n', and if the letter 'o' is directly preceded by the letter 'o', and if the letter 'o' is directly preceded by the letter 'i', and if the letter 'i' is directly preceded by the letter 's', then: assign the letter 's' the /sh/ phoneme #20; assign the letter 'i' the /sh/ phoneme #20; assign the letter 'o' the /e/ phoneme #36; assign the letter 'n' the /n/ phoneme #10; and light the block stations for the letters 's', 'i', 'o', and 'n'.

(440)

Fig. 11 j

#### (Pass 40)

If the virtual word has the letter 'c', and if the letter 'c' is directly preceded by or directly followed by another letter 'c', and if the two letter 'c's are directly followed by the letter 'e', or the letter 'i', then: assign the first letter 'c' the /k/ phoneme #7;

assign the second letter 'c' the /s/ phoneme #13; and light the block stations for the first letter 'c', the second letter 'c', and the letter 'e' or 'i'

440

### (Pass 41)

If the virtual word has the letter 'o', and if the letter 'o' is directly followed by the letter 'i', then: assign the letter 'o' the /oi/ phoneme #41; assign the letter 'i' the /oi/ phoneme #41; and light the block station for the letter 'e' and the block station for the letter 'i'.

441

### (Pass 42)

If the last letter of the virtual word is the letter 's', then: assign the letter 's' the /z/ phoneme #18.

442

# (Pass 43)

If the virtual word has the letter 'h', and if the letter 'h' is directly preceded by the letter 'c', and if the letter 'c' is directly preceded by the letter 't', then: assign the letter 't' the silence phoneme #0; and light the block stations for the letters 't', 'c', and 'h'.

443

### (Pass 44)

If the virtual word has the letter 'r' or the letter 'k', and if the letter 'h' immediately follows the letter 'r', or the letter 'k', then: assign the letter 'h' the silence phoneme #0; and light the block stations for the letter 'h', and the letter 'k' or 'r'.

444

445

Fig. 11k

### (Pass 45)

If the virtual word has the letter 'm', and if the letter 'm' is directly followed by the letter 'b', then: assign the letter 'b' the silence phoneme #0; and light the block stations for the letters 'm', and 'b'.

445

J,

#### (Pass 46)

If the virtual word has the letter 'k' or the letter 'm', and if the letter 'l' immediately precedes the letter 'k', or the letter 'm', then: assign the letter 'l' the silence phoneme #0; and light the block stations for the letter 'l', and the letter 'm' or 'k'.

446

### (Pass 47)

If the virtual word has the letter 'b', and if the letter 'b' is directly followed by the letter 't', then: assign the letter 'b' the silence phoneme #0; and light the block stations for the letter 'b', and the letter 't'.

447

## (Pass 48)

If the virtual word has the letter 'm', and if the letter 'm' is directly followed by the letter 'n', then: assign the letter 'n' the silence phoneme #0; and light the block stations for the letter 'm', and the letter 'n'.

448

### (Pass 49)

If the last letter in the virtual word is 'h', and if the letter 'h' is directly preceded by a vowel, then; assign the letter 'h' the silence phoneme #0; and light the block stations for the letter 'h', and the vowel that precedes the letter 'h'.

449

450

Fig. 111

# (Pass 50)

If the first letter in the virtual word is 'w', and if the letter directly following the letter 'w' is the letter 'h', and if the letter directly following the letter 'h' is the letter 'o', then: assign the letter 'w' the silence phoneme #0; and light the block stations for the letters 'w', 'h', and 'o'.

450

## (Pass 100)

If the virtual word has the letter 'd', and if the letter 'd' is directly followed by the letter 'g; or the letter 'j', then: assign the letter 'd' the silence phoneme #0; and light the block stations for the letter 'd', and the letter 'g' or 'j'.

451

(Pass 101)

If the last letter in the virtual word is 'm', and if the letter 'm' is directly preceded by the letter 's', then; assign the letter 's' the /z/ phoneme #18; and light the block stations for the letter 's' and the letter 'm'.

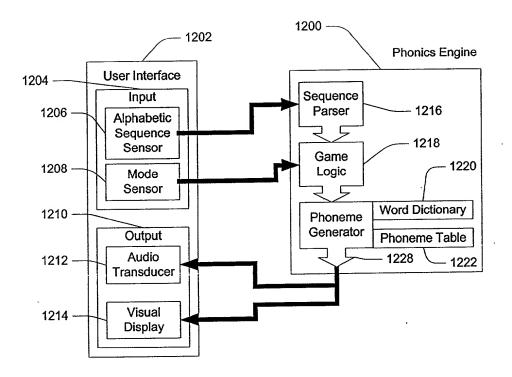
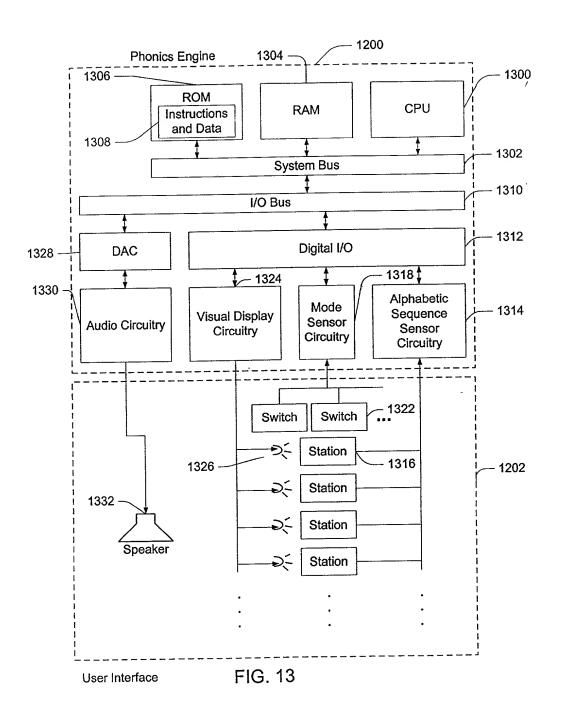


FIG. 12



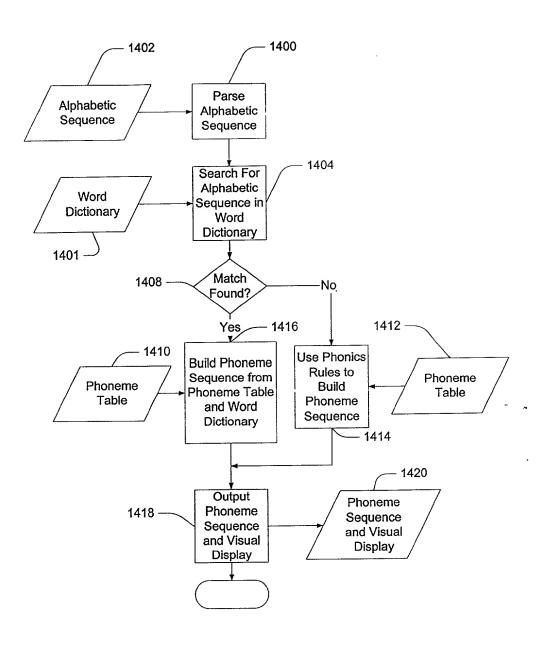


FIG. 14

